

CD34 Monoclonal Antibody (RAM34), Alexa Fluor™ 700, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human, Goat
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Alexa Fluor™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RAM34
Conjugate	Alexa Fluor™ 700
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_493998

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	17 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	4 Publications
Immunocytochemistry (ICC/IF)	-	8 Publications
Flow Cytometry (Flow)	1 µg/test	65 Publications

Product Specific Information

Description: The RAM34 monoclonal antibody reacts with mouse CD34, also known as mucosialin. It has been reported that the RAM34 antibody can be used to detect CD34+Sca-1+c-Kit+ cells. CD34 is a highly glycosylated (approximately 90-120 kDa) member of the sialomucin family and is expressed by capillary endothelial cells, bone marrow stroma, and a small subpopulation of mouse bone marrow cells. RAM34 has been used to purify mouse hematopoietic stem cells (HSC) to near homogeneity. CD34 expressed on endothelial cells is a ligand for CD62L and plays a role in adhesion. Simultaneous staining of mouse bone marrow cells with a cocktail of antibodies to lineage markers (CD3, CD11b, Ly6G, TER-119 and CD45R/B220) reveals a subset of cells that stain with the RAM34 antibody and express undetectable to low levels of the indicated lineage markers.

Applications Reported: This RAM34 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RAM34 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended

that the antibody be carefully titrated for optimal performance in the assay of interest.

Note: When staining with the RAM34 antibody an incubation time of 90 minutes is recommended to obtain the optimal signal to noise ratio.

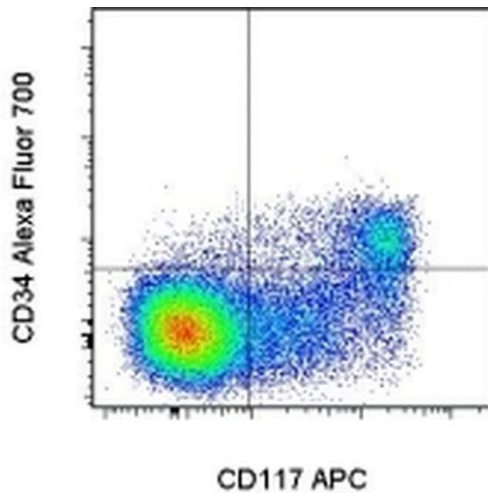
For more detailed information on staining with RAM34, please refer to Ema et al., listed under References.

The Alexa Fluor® 700 emits at 723 nm and can be excited with the red laser (633 nm). Most instruments will require a 685 LP mirror and 710/20 filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD34 Monoclonal Antibody (RAM34), Alexa Fluor™ 700, eBioscience™



CD34 Antibody (56-0341-82) in Flow

Staining of C57Bl/6 bone marrow cells with Mouse Hematopoietic Lineage eFluor® 450 Cocktail (Product # 88-7772-72), Anti-Mouse CD117 (c-Kit) APC (Product # 17-1171-82) and 1.0 µg of Anti-Mouse CD34 Alexa Fluor® 700. Lineage negative/low, viable cells, as determined by Fixable Viability Dye eFluor® 506 (Product # 65-0866-14), were used for analysis.

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Immunohistochemistry (17)

Cell & bioscience

14-3-3 loss leads to neonatal lethality by microRNA-126 downregulation-mediated developmental defects in lung vasculature.

"Published figure using CD34 monoclonal antibody (Product # 56-0341-82) in Immunohistochemistry"

Authors: Yang J, Joshi S, Wang Q, Li P, Wang H, Xiong Y, Xiao Y, Wang J, Parker-Thornburg J, Behringer RR, Yu D

Species
Not Applicable

Dilution
Not Cited

Year
2022

The Journal of pathology

A smooth muscle-derived, Braf-driven mouse model of gastrointestinal stromal tumor (GIST): evidence for an alternative GIST cell-of-origin.

"Published figure using CD34 monoclonal antibody (Product # 56-0341-82) in Immunohistochemistry"

Authors: Kondo J, Huh WJ, Franklin JL, Heinrich MC, Rubin BP, Coffey RJ

Species
Not Applicable

Dilution
Not Cited

Year
2020

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Frozen) (4)

The Journal of biological chemistry

Age-dependent increase in angiotensin-like protein 2 accelerates skeletal muscle loss in mice.

"Published figure using CD34 monoclonal antibody (Product # 56-0341-82) in Immunohistochemistry"

Authors: Zhao J, Tian Z, Kadomatsu T, Xie P, Miyata K, Sugizaki T, Endo M, Zhu S, Fan H, Horiguchi H, Morinaga J, Terada K, Yoshizawa T, Yamagata K, Oike Y

Species
Not Applicable

Dilution
Not Cited

Year
2018

Proceedings of the National Academy of Sciences of the United States of America

Sonic hedgehog signals to multiple prostate stromal stem cells that replenish distinct stromal subtypes during regeneration.

"Published figure using CD34 monoclonal antibody (Product # 56-0341-82) in Immunofluorescence"

Authors: Peng YC, Levine CM, Zahid S, Wilson EL, Joyner AL

Species
Not Applicable

Dilution
Not Cited

Year
2013

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More applications with references on thermofisher.com

ICC/IF (8) Flow (65)

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